

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

REC'D 19 JUL 2005

WIPO PCT

Applicant's or agent's file reference 609PCT MP:MM	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. CT/AU2004/001053	International filing date (day/month/year) 9 August 2004	Priority date (day/month/year) 8 August 2003
International Patent Classification (IPC) or national classification and IPC Int. Cl. <sup>7</sup> H04L 1/16, 12/56; H03M 5/12		
Applicant CLIPSAL INTEGRATED SYSTEMS PTY LTD et al		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
- a. ☐ (sent to the applicant and to the International Bureau) a total of sheets, as follows:
- ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
- ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I . Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 8 June 2005	Date of completion of the report 30 June 2005
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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/AU2004/001053

## Box No. I Basis of the report

With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1 (b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ the international application as originally filed/furnished

☐ the description:

pages as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☐ the claims:

pages as originally filed/furnished

pages\* as amended (together with any statement) under Article 19

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☐ the drawings:

pages as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/AU2004/001053

## Box No. IV Lack of unity of invention

☐ In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:

- ☐ complied with.
- ☒ not complied with for the following reasons:

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Preliminary Examining Authority has found that there are two inventions:

1. Claims 1 - 26 are directed to a communications protocol for use in a network of devices, the protocol having a frame including a first time slot for transmitting data, a second time slot, after the first time slot, for transmitting a first acknowledge state, and a third time slot, after the second time slot, for transmitting a second acknowledge state. It is considered that the protocol having a frame including a first time slot for transmitting data, a second time slot, after the first time slot, for transmitting a first acknowledge state, and a third time slot, after the second time slot, for transmitting a second acknowledge state comprises a first "special technical feature".
2. Claims 27 - 30 are directed to a method of providing a marker in a data frame, the method including encoding data bits at a particular point in a data sequence to provide states, generating a state combination that is an illegal combination and recognising that illegal combination as a marker. It is considered that encoding data bits at a particular point in a data sequence to provide states, generating a state combination that is an illegal combination and recognising that illegal combination as a marker comprises a second "special technical feature".

Since the above mentioned groups of claims do not share either of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept.

4. Consequently, this report has been established in respect of the following parts of the international application:

- ☒ all parts.
- ☐ the parts relating to claims Nos.

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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2004/001053

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1 – 30	YES
	Claims None	NO
Inventive step (IS)	Claims 1 – 30	YES
	Claims None	NO
Industrial applicability (IA)	Claims 1 – 30	YES
	Claims None	NO

## 2. Citations and explanations (Rule 70.7)

### Documents cited for the purpose of compiling this report:

(D1) US 6574668 B1 (GUBBI et al.) 3 June 2003;

(D2) WO 2001/078426 A1 (PROXIM, INC. et al.) 18 October 2001;

(D3) WO 2004/034310 A2 (COLDER PRODUCTS COMPANY) 22 April 2004; and

(D4) US 2003/227934 A1 (WHITE et al.) 11 December 2003.

### NOVELTY (N) and INVENTIVE STEP (IS) claims 1 – 30

The invention defined in claims 1 – 26 is novel and inventive in light of the cited prior art documents that do not, either alone or in obvious combination, disclose all of the features defined in the claims. In particular none of the documents disclose or obviously suggest to a person skilled in the art the feature of a protocol having a frame including a first time slot for transmitting data, a second time slot, after the first time slot, for transmitting a first acknowledgement state, and a third time slot, after the second time slot, for transmitting a second acknowledgement state.

The invention defined in claims 27 – 30 is novel and inventive in light of the cited prior art documents that do not, either alone or in obvious combination, disclose all of the features defined in the claims. In particular none of the documents disclose or obviously suggest to a person skilled in the art the feature of providing a marker in a data frame including encoding data bits at a particular point in a data sequence to provide states, generating a state combination that is an illegal combination and recognising that illegal combination as a marker.

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